

RYLE ON DISPOSITIONS AND HYPOTHETICALS

by Robert W. Burch

In *The Concept of Mind*,¹ Professor Ryle gives an analysis of dispositions which is puzzling if it is taken strictly and literally. Perhaps by exploring what is thus puzzling about Ryle's analysis we shall better understand what it means.

I

Ryle uses "dispositional" to label properties of various sorts, including capacities (or abilities, skills, or powers) (*CM*, 42, 45, and 118–119), inclinations (or bents) (*CM*, 33 and 45), susceptibilities (*CM*, 33), habits (*CM*, 33), liabilities (*CM*, 43, 45, 118, and 123), tendencies (*CM*, 117–118 and 131–133), propensities (*CM*, 123), pronenesses (*CM*, 118–119 and 133), and likelihoods (*CM*, 43). A main thesis of *The Concept of Mind* is that many of the notions we use to describe people's mental life, and which we often wrongly take to refer to the occurrence of "ghostly" mental causes, actually signify dispositions. Obviously, Ryle has the task of giving a more or less precise characterization of dispositional properties, and he does so by maintaining that propositions attributing dispositional properties are, in effect, hypotheticals. Roughly, the idea is that a brittle substance is one which, *if* hit, *will* shatter; a vain man is a man who, *if* he gets a chance, *will* boast or otherwise seek his own glory; and a skillful tennis player is one who, *if* the circumstances are not adverse, *will* play well. Ryle does not provide a general statement saying exactly what the equivalence between dispositional statements and hypotheticals amounts to,² but in any event, his thesis implies that disposition-attributing propositions are materially equivalent to some logical complex of hypothetical propositions. Understood literally this thesis is puzzling, especially when taken in conjunction with several other things Ryle says about dispositions. Let us look at a couple of these things.

First, Ryle nearly equates dispositional statements with laws.³ Laws are, or are also statable as, open—i.e., universal—hypothetical sentences (*CM*, 120). Since a law is such an open hypothetical, a law can be used as an

Mr. Burch is Assistant Professor of Philosophy at Rice University.

"inference ticket (a season ticket) which licenses its possessors to move from asserting factual statements to asserting other factual statements" (CM, 121). Understanding any law, for Ryle, involves being able to apply it in concrete cases, and applying a law is making *concrete inferences* from and to particular matters of fact, for various purposes (CM, 121). Ryle constantly emphasizes this feature of laws as involved in inference, argument (CM, 122), warranting (CM, 123), and—since laws normally function to explain events which fall under them—in explanation (CM, 124). Like laws, dispositional statements are "explanatory-cum-predictive assertions" (CM, 25). "Dispositional statements about particular things and persons are . . . like law statements in the fact that we use them in a partly similar way. They apply to, or they are satisfied by, the actions, reactions and states of the object; they are inference-tickets, which license us to predict, retrodict, explain and modify these actions, reactions and states" (CM, 124). To explain that the glass shattered when the rock hit it *because* it was brittle is to claim that the occurrence of the glass's shattering is an instance of (roughly) the law-like hypothetical "whenever a rock hits this piece of glass, etc., then it shatters." The hypothetical here simply spells out the meaning of "the glass is brittle." If we explain a man's actions as being from vanity, then we explain in exactly the same way as we do when we explain the glass's shattering as being the result of its brittleness. Being a vain man just *is* being a man who acts in certain recognizable ways in certain sorts of circumstances. The explanation of the glass's shattering and the explanation of the man's boasting both work—just as explanations appealing to laws do (see CM, 121)—by involving instantiations of *universal* propositions. Although Ryle does not put it quite like this, dispositional explanations seem to work, on his view, because they are really particularisations of the logically valid argument form:

"(y) . . . (z) (P (a, y, . . . , z) implies Q (a, y, . . . , z))

P (a, b, c, . . .);

Therefore, Q (a, b, c, . . .)."

Secondly, for Ryle dispositional statements are not merely hypotheticals: they are testable hypotheticals (CM, 46 and 117).⁴ This thesis is ambiguous and may make either the weaker claim that a dispositional statement is logically composed of many hypotheticals each one of which is testable, or the stronger claim that a dispositional statement is logically equivalent to a single testable hypothetical. It would not usually matter whether one said that a dispositional statement is equivalent to one hypothetical or to many hypotheticals combined, since "(A and B) implies (C or D)" is tautologically equivalent to "(A implies C) or (B implies D)." But it will matter for the sake of my argument whether one says merely that each of "(A implies C)" and "(B implies D)" is testable, or also that "(A and B) implies (C or D)" is testable. I shall understand Ryle to hold the stronger thesis.⁵

II

The fundamental strategy of *The Concept of Mind*, by arguing that the mentalistic notions used to characterize people are dispositional notions, is to establish that it is incorrect to interpret such notions as signifying "ghostly" mental items or occurrences in a special realm, the mind. But it is precisely as applied to such human abilities, tendencies, and so on that Ryle's analysis, literally interpreted, seems most puzzling. What is puzzling about it is that it seems to assimilate specifically human abilities, tendencies, and so on, to material properties like brittleness and solubility, which Ryle habitually uses to illustrate dispositional traits. No doubt Ryle takes care to distinguish between various sorts of dispositions, and would not want to make human intelligence look just exactly like the solubility of sugar. But I think that his analysis of dispositional statements as hypotheticals, when we interpret it strictly, makes it impossible to distinguish sharply enough between human and material properties. We can see why this is so by looking at how the strictly interpreted analysis fares when applied to intelligent capacities, the case where the analysis has its maximum plausibility.

Ryle, with qualification, maintains that to say that someone knows French "is to say that if, for example, he is ever addressed in French, or shown any French newspaper, he responds pertinently in French, acts appropriately, or translates it correctly into his own tongue" (CM, 123). The qualification is that the analysis is too precise: if our someone did not do the things in the apodosis, but was asleep, absentminded, drunk, or in a panic, we would not have to take back the ability-attribution. But would not the analysis remain too precise even if we added to the protasis the condition that our subject is not absentminded, drunk, and so on? For the subject might not "respond pertinently in French, etc." not because he cannot speak French, and not because he is absentminded, drunk, and so on, but for a host of other reasons. To pick a few, he may not hear, may mishear, may misunderstand, or may have lost his voice. More seriously, he may not feel like answering, may wish to be rude, may wish not to strain his throat, may be loath to speak French, or may have the intention of misleading the addressing person. Perhaps it will be said that if the subject utters a garbled sentence in what is not really French, gives a ghastly translation, or says nothing, but does this because of one of the abovementioned reasons, then this response *is* one of the "appropriate responses" mentioned in the apodosis of Ryle's hypothetical. But this play only raises the problem of how we are to identify these "appropriate responses." If we identify them as *any* responses appropriate for one who knows how to speak French, then we preserve the thesis that the dispositional statement in question is hypothetical in form only by making this thesis trivial. For on this account the thesis reduces to the triviality that "he knows French" means that he gives the responses consistent with knowing, or

appropriate for one who knows, French. But if we identify the "appropriate responses" in any other way than the suggested one, then the thesis will be false. For, *no* particular response is *inconsistent* with knowing how to speak French, not even the "response" of not responding at all. That is, *anything* one does on a particular occasion is consistent with knowing how to speak French. One might even sincerely respond, "I don't know how to speak French," and this be consistent with his knowing how to speak French. He may not know that what he speaks is called "French." He may be so overly modest or perfectionistic that what others call "speaking French" he would not dare. He may have forgotten that he speaks French, or he may have been led to think mistakenly that he does not.

It may then be suggested that by expanding the hypothetical's protasis we can identify the "appropriate responses" in some other way than as responses consistent with knowing how to speak French, and still end up with a true hypothetical analyzing this know-how. But how could we expand the protasis so as to make the hypothetical a correct analysis of the know-how? Under what conditions *must* someone who knows French respond "in the appropriate way," where "the appropriate way" is identified nontrivially? That is, under what conditions could we definitely conclude that a person does not know French provided that he does not respond in the "appropriate way"? I say, none, unless these conditions are described in such a way as to make the hypothetical trivially true.⁶ There seems to be a very complicated and indefinitely numerous set of conditions which can keep a French speaker from, for example, uttering reasonably good French sentences or translating with the correct French words. He might have a nagging headache that day which distracts him. Some yet unidentified disease of a mental sort might be debilitating him. A bee might sting him at the very moment he was going to speak, or he might at that very moment fall and break his leg. Or more seriously, he might not want to try to speak French.

A hypothetical analyzing a person's ability to speak French must then at least include conditions which imply that none of these sorts of things happen. This could be done in either of two ways. We could put such conditions into the hypothetical's protasis by conjoining them with those conditions which initially seemed logically to imply that the "appropriate responses" are made. Or we could put the negations of these conditions into the apodosis by disjoining these negations with those appropriate responses. The first way would yield hypotheticals like, "If he has the chance to speak French, etc., *and* a bee does not sting him, *and* he does not fall down, *and* so on, then he translates correctly, etc." The second would yield, "If he has the chance to speak French, etc., then he either translates correctly, etc., *or* else a bee stings him, *or* he falls down, *or* etc." Of course these two ways of including these conditions are equivalent, since "(A and not-B) implies C" is tautologically equivalent to "A implies (C or B)."

What is crucial here is that there seems to be no limit to the sorts of things that could prevent a French-knower from giving the "appropriate responses" nontrivially identified. So we seem to need not just any series of conditions in our hypothetical, but an *infinite* series of conditions. If we insist on preserving the hypothetical analysis of this disposition, then the hypothetical proposition in question will have to contain an infinite series of terms. I doubt the sense of talking about such infinite hypotheticals. But anyone who does not want to talk about them as a way of preserving a strict interpretation of the Rylean analysis of dispositions must deal with several difficulties.

One problem with such hypotheticals, containing as they do an infinite string of terms, is that of their *testability*. For tests are finite, but a hypothetical with an infinite number of terms requires an infinitely long test, or an infinite number of finitely long tests, both of which are impossible to carry out. It might be suggested that we can break up the single complex hypothetical into a long disjunction of simple hypotheticals,⁷ each of which can be tested. But this decomposition still would not enable us to test conclusively⁸ for the truth of the hypothetical itself. And surely Ryle introduces the point about *testable* hypotheticals just to account for how we can conclusively ascertain facts about another person's mental goings-on.

Another difficulty is that *infinite* hypotheticals, if we tried to use them, would be infinitely unwieldy, whereas "he knows French" is an easily-manageable proposition. The ordinary man knows quite well how to operate with "he is vain." With an infinite hypothetical he, like the rest of us, would fumble and falter.

The most serious difficulty is that an infinite hypothetical would not serve to enable us to infer or predict matters of fact from other matters of fact. Nor would it enable us to explain, in the way Ryle indicates, matters of fact as following from other matters of fact. For either we never could be sure that the infinite series of conjoined conditions mentioned in the protasis obtained, or else we could never get to particular matters of fact from the infinite disjunction of facts, events, and conditions in the apodosis. For hypotheticals to be inference-tickets, they must be finite in both protasis and apodosis. If they are to be explanatory-cum-predictive, they cannot be infinite.

Before considering ways of attempting to avoid these arguments, I want to say why Ryle's analysis seems to assimilate the specifically human abilities to the properties of materials. In at least their scientific sense, solubility and brittleness can be spelled out as hypotheticals in whose protasis and apodosis one need only include reference to a *finite*⁹ number of conditions and occurrences. Solubility, for example, is *defined* by scientists as that property which matter has if it dissolves when you do certain finitely specifiable things to it. So there are finitely-conductible conclusive tests for solubility. Also reference to the solubility of a lump does license us to predict that a certain lump

will dissolve in certain circumstances. A soluble lump *must* dissolve when the circumstances are right. But *must* French speakers do a certain finite number of things when the circumstances are right? No. And saying that they must is puzzling because it not only overlooks the unlimited complexity of the activities which reveal human abilities, but it also specifically implies that men are not free. French speakers, no matter what the circumstances are, can elect neither to speak French nor translate it. It will not do to suggest that they must speak, translate, etc., given certain circumstances.

But Ryle's account when taken strictly does imply that in certain sorts of circumstances French speakers *must* speak French. For this account holds that the ability to speak French is a disposition, which in turn is to be spelled out as a predictive and explanatory hypothetical in whose protasis we include various circumstances, and in whose apodosis we include various acts, episodes, and events. However, if this hypothetical is to be explanatory and predictive, then it must be finite in its listing of these circumstances and events. This is sufficient to imply that French speakers *must* speak French, or do some finite number of other things, in certain finitely specifiable sorts of circumstances.

For every hypothetical is like every other hypothetical in logical form; every hypothetical minimally asserts the same connection between its protasis and its apodosis: from the truth of a hypothetical and the truth of its protasis, you can logically *infer* the truth of its apodosis. Hypotheticals differ from one another in kind, not by being different in respect of their logical form, but rather only by virtue of their protatic and apodotic "stuffing." An immediate consequence of this is that, if a hypothetical spelling out of a dispositional statement is true, then when the conditions or circumstances of the protasis are realized, one can logically *infer* that the acts, episodes, and events of the apodosis take place.¹⁰

One might try to avoid my arguments against the hypothetical analysis of the ability to speak French by judiciously choosing the protasis so that the infinite number of relevant conditions are somehow included or summarized in it, by including in the protasis some reference to the will so that the objection about freedom is blocked, and by choosing apodosis in an obvious way. But I doubt that this strategy can work. For example, suppose I say that our subject's ability is equivalent to:

If the occasion demands it and if he wants to and nothing prevents him, then he speaks, writes, etc., French reasonably well.

This will not do because he may also want not to speak French, and so for that reason not speak it.

Suppose we try:

If the occasion demands it and if he wants to and does not want not to, and if nothing prevents him, then he speaks, writes, etc., French reasonably well.

This will not do either because he may rather want or intend to do something else which precludes his speaking French well, and thus for that reason not speak it. We could, I suppose, make the absence of such wants or intentions part of the meaning of "not wanting not to speak French," or we could simply add to the protasis the condition that the subject does not want or intend any such thing. But this gains us nothing very great, for we could think easily of still other conditions, *ad infinitum*, which would account for his not speaking French reasonably well. If we tried to include all these things in the hypothetical then we eventually would have to add to the protasis, "and no reason other than inability to do so accounts for his not speaking French." And then we would have a true hypothetical analysis, but an obviously trivial one.¹¹

Suppose we then try, as equivalent to our subject's having the ability to speak French:

If he tries to and nothing prevents him, then he speaks, writes, etc. French reasonably well.

With this new suggestion a new problem comes to the fore.¹² "If he tries to and nothing prevents him, then he speaks, writes, etc., French well" is not a testable hypothesis; indeed it is not even falsifiable, for it is an analytic truth. Thus it cannot be equivalent to "he can speak French," which is anything but analytic. The intended analysis is merely an analytic proposition because we use "prevent" so that whenever anyone tries to do something and fails, then *something* can *always* be said to have prevented him from doing it. That something, it is to be noted, might be his *inability* to do it. We might notice this feature of the notion of being prevented from doing something, and accordingly modify our hypothetical to:

If he tries to and nothing except for his inability to speak it prevents him, then he will speak, write, etc., French reasonably well.

I readily grant that this proposition is materially equivalent to "he can speak French," and that the proposition is hypothetical in form. But the reason why it is materially equivalent to "he can speak French" shows us that this material equivalence is trivial. For example, suppose the hypothetical is false. Then our subject tries and is not prevented by anything other than inability to speak French from speaking French, but he does not speak it. So he is of course unable to speak French; since he tried and failed he must have been prevented by something (analytically), but since he is not prevented by anything *other than* his inability, then he must be prevented by his inability, and thus he must be unable. But what we have here is merely a round-about way of saying that one can speak French if and only if he is not unable to speak it. Hardly surprising, but hardly interesting either.

III

The argument against a literal reading of Ryle's position is strong even when the argument is made against its most plausible case: abilities. The argument is still stronger against other cases, like tendencies, pronenesses, liabilities, and likelihoods. Let's take tendencies first. A tendency is what we are talking about when we say "he (it) tends to X" or "he (it) has a tendency to X."

If I say that it has a tendency—or that there is a tendency for it—to rain in Houston, or that it tends to rain in Houston, I am not saying that it *will* rain in Houston given certain conditions, which perhaps I have in mind. Rather, I am usually only saying that it rains with some frequency in Houston. I standardly make such a judgment with an eye to more or less frequent occurrences of rain in Houston in the past, probably the recent past, and not necessarily with an eye to predicting such occurrences given certain conditions in the future. If asked, for instance, to substantiate such a judgment, I would not try to create the conditions specified in the protasis of some hypothetical whose apodosis is "it rains in Houston," to see whether or not it did rain in such cases; I would rather point to more or less frequent cases of rain in the past, and that would be that. I could not, if asked, even begin to give any set of conditions under which it *will* definitely rain in Houston, and need not do so in order correctly to make the judgment that it tends to rain there. Perhaps I need a certain amount of knowledge about Houston's past rainfall to make the judgment; but I do not need to have expert or amateur knowledge of meteorology. Similarly, "he tends to wear red shirts" usually means that he does rather often wear them, and "this vase has a tendency to fall off the table" usually means that it has fallen off several times. There is no finite set of nontrivially specifiable conditions under which possessors of tendencies *must* do any finite set of nontrivially specified acts. Often to say that something tends to be a certain way is only to say that it often happens that the thing is that certain way. Often to say that a person has a tendency to do something is just to say that the person sometimes desires or wants to do it.

The same holds of liabilities and pronenesses. If I tell you that this milk is liable to go sour, I am not telling you that given certain conditions you can logically conclude that it will go sour. And, if from what I say you do conclude that under certain conditions it will go sour, you are making a wrong inference. My basis for telling you that the milk is liable to go sour may be that milk from your dairy often does, or that it is a warm day and milk often does go sour on warm days. But even if the day is warm and your milk is from that dairy, and even if other conditions for milk's going sour are present, your milk need not go sour. That it does not go sour does not at all prove

that I was wrong to say that the milk was liable to go sour—though it may argue that you were lucky.

A man who is *prone* to have accidents is not a man who *will* have one given certain conditions. He is a man who, as his record testifies, often does have accidents. We would be wrong to infer about such a man that, given certain conditions, he is absolutely certain to have an accident. A man who is *susceptible* to colds or prone to have colds is usually someone who often has had them; but he may be someone whose bodily defenses are functioning poorly. At any rate, it would be a mistake to *infer* that he will get a cold under certain conditions. We say that it is *likely* to rain, or that Citation is *likely* to win, just because we cannot give a set of conditions under which it will rain for sure, or under which Citation will win for dead certain. We often say that a person is *apt* to be late if he often is—and that means often has been—late. Even if he is apt to be late, we cannot correctly infer that he will be late. Even if he is apt to be late in general, and apt to be late on this occasion, he may still on this occasion show up on time. Maybe the occasion is especially important to him. Or perhaps his wife hustles him off early.

IV

The problem Ryle's account is designed to clear up is an important one. Specifically human dispositions have some connection with certain sorts of incidents taking place in certain sorts of situations. The problem is to say exactly in what the connection consists. It is not simply a matter of some general but merely contingent and accidental fact that a possessor of a disposition typically does certain things in certain circumstances. A strict and literal interpretation of Ryle's account has the virtue of recognizing this. On the other hand, as we have seen, the connection cannot consist in the "fact" that the possessor of a human disposition logically must do certain things given certain conditions. The relation between dispositions and their typical exercise is not one of logical implication. What then is it? If we make some inroads into this problem we can, I think, see what Ryle is getting at when he says that dispositional statements are hypothetical. One reason Ryle says this is that it seems to account for the fact that dispositional statements are predictive. Unfortunately, as we have seen, dispositional statements are not predictive in the quasi-scientific way indicated by the strict interpretation of Ryle's analysis. Yet there is a sense in which dispositional statements *are* "predictive," and by exploring this sense we can better understand Ryle's meaning.

Consider, for example, tendencies. Like other sorts of dispositions, tendencies bear logically upon *expectations* about what will happen. As Ryle puts it, "Fido tends to howl when the moon shines" . . . licenses the hearer . . . positively to expect barking" (CM, 131). To say of, for example, some person that he has a certain tendency is to serve notice that certain things *can be*

expected: namely that he *will*, at some time in the future (perhaps soon, but not at any particular definite time) do what he has been said to have a tendency to do. If you tell me that you have a tendency to overeat, I will expect you to overeat now and again; equivalently, I will not be surprised or take it as unusual or out of the ordinary if you do on some occasion overeat. But on the other hand, if you do not overeat, even given that you had several good chances to do so, I will not correctly conclude that you were lying or mistaken about yourself, even though I may be mildly surprised. ("Tendency" in such cases may signify desire, not habitual occurrence.) For you may be dieting because of your tendency, or you may be sick and not now feel like eating, or so nervous that it has destroyed your appetite for days running. Again, if I learn that birds tend to fly over my property, I expect them to do so, and I will be mildly surprised if no birds come over it. But I do not correctly infer that some minimum number of them will fly over my property during some future time period.

Tendencies are not a matter of some complicated certainty, but rather a matter of some often simple uncertainty. To affirm that something has a tendency is not to give anyone an inference-ticket; it is rather to furnish him with an expectation-ticket. The same thing holds for statements containing other dispositional notions. They license not inference or prediction of a quasi-scientific sort, but rather expectation.

There are certainly differences between tendencies and liabilities, tendencies and likelihoods, liabilities and likelihoods, and so on.¹³ But all are used, as are a host of other concepts belonging to a diverse family, in propositions which serve notice to expect certain things, or equivalently not to be surprised if certain things transpire. The wider family includes not only "tends to," "is likely to," "is prone to," "is apt to," but also "does" (the habitual "does"), "may," "might," "might any minute," "is inclined to," "has an inclination to," "is about to," "is on the verge of," (colloquially) "is fixing to," "it will," and "it is certain to." The members of this family are alike in that they all serve to arouse expectation, given specific circumstances. But they differ one from another by the nature and degree of the expectation that they function to arouse. All expectation is not alike. I may expect you to come right away, or to come any minute now, or next Friday at 3:00 p.m., or some time before the term ends, or either before the tenth of the month or after the fifteenth. Furthermore, I can expect with differing degrees of certainty that you will come. I may vaguely suspect, or "sort of have a hunch," that you will come; I may be pretty sure that you will come; or I may be absolutely certain. Perhaps I am taking a stab in the dark when I say that you will come; perhaps I have it on good authority; perhaps, like the rising of the sun, physics predicts it and it happens every day. The family of notions which can be used to arouse expectation differ one from another in the degree of certainty they are typically usable to arouse, given certain circumstances.¹⁴ If you tell me that John

will be here tomorrow and I believe you, I will expect him to be here tomorrow with a fair measure of certainty; I shall be fairly much surprised if he does not show up. But if you tell me that John has a *tendency* to come and I believe you, then I shall also expect him to come, but not so strongly; and if he does not come, I shall not be especially surprised or disturbed, or find anything out of the ordinary. If, again, you tell me that John *might* be in New York, I will not be surprised to find him there; but equally I will not be surprised not to find him there. If John is *inclined* to buy a new car, he may well do so and may well not do so. But if he is *on the verge* of buying the car, then we can with some increased assurance expect it any minute, or any day, now; it is very likely, though not of course absolutely certain, to happen.

The differences, then, among these phrases which we use to arouse expectation are partly a matter of how close or far away in time the expected events are, and partly a matter of the degree of certainty about them which the phrases possess the job of leading us to have, which two matters, of course, are connected in many ways. Still all these phrases serve to arouse expectation. What Ryle is really getting at with his analysis of dispositions is, I think, that dispositional statements license us to have certain expectations in certain situations, not really that they license us to infer in some quasi-scientific way that certain events will happen.

It may be objected that this reading of Ryle omits one of the especially attractive features of the hypothetical analysis strictly interpreted, namely its account of how an appeal to dispositions functions as an explanation for actions. It cannot be denied that we explain a person's sudden outbursts as arising from anger, his picking up a heavy weight as the natural outcome of his strength, his passing by our house by reference to his perambulatory habits, and so forth. As we have seen, the literal interpretation of the Rylean analysis provides a very simple account of how such explanations work: we can explain a person's explosive curses by saying that he was angry, because his *being angry* just *means* that he emits explosive curses if the circumstances are right. All we add or imply in the explanation is that the circumstances were right. So it can be objected to my loosening up of the Rylean analysis that it renders it impossible to give an adequate account of dispositional explanations. For my own account seems to make dispositions too weak and watered-down for a proper explanation to rest on them. This objection is easily met. The explanatory force of dispositions seems not in fact to work in the way indicated by a strict interpretation of the hypothetical analysis. Rather the appeal to a disposition explains particular actions or events simply by saying that those particular actions might well have been expected. For example, they might have been expected because someone had a tendency to do them, or did them habitually, or before doing them was right on the brink of doing them; or because they are typical of or regularly done by

someone who is tending, able, or about to; or simply because they often or regularly happen.

Still it might be said that the sort of explanation implied by my account is not a *real* explanation; or that it is only an explanation in a much weakened and watered-down way; or that if it is a kind of explanation, then it itself must be based on yet further grounds or some further rationale of some sort, which accounts for its actually being an explanation. But behind this sort of objection there is an excessively narrow view of "explanation" at work. The view is that a "real" explanation of a fact must conjure up and invoke a set of propositions which together logically entail that fact. Just possibly such logically sufficient explanations are given, or at least sought, in certain scientific disciplines; perhaps the theoretical physicist wants his theory to consist of universal propositions from which, together with propositions describing particular matters of fact or particular circumstances, he can logically deduce what will happen. But ordinary men conducting the ordinary affairs in which they use and understand explanations which appeal to dispositions are not theoretical physicists. They are far from presuming to possess, or require, explanations of this sort. Ordinary people in common situations in life do not have one single form of explanation, but rather many; and the explanatory force of these many sorts of explanations does not rest on their all depending on some single universal explanatory scheme. We can see how many different sorts of things may be involved with the single word "because" just by imagining how many different sorts of "justifications" or "further elucidations" someone could give for his use of a because-sentence: "It always happens that way," "It has done that regularly for years," "It often turns out that way," "It just does happen that way from time to time." Explanations often appeal to what always, sometimes, or even occasionally happens, and they need not appeal to what-must-happen-if.

Still, it may be objected, even if the view of dispositions with which I am trying to saddle Ryle does enable us to give an account of prediction and explanation by appeal to dispositions, it nevertheless does not enable us to give that account which Ryle's text suggests and which I describe in Part I. I agree that this is so. Still this is not a telling objection. For there are portions of Ryle's text which suggest that he more or less explicitly recognizes the main point I have been making throughout this paper. He says, for example,

There are many dispositions the actualizations of which can take a wide and perhaps *unlimited* variety of shapes. . . . If we wished to unpack all that is conveyed in describing an animal as gregarious, we should . . . have to produce an *infinite* series of different hypothetical propositions. (*CM*, 44, my italics)

Again, "the higher-grade dispositions of people . . . are, in general, . . . dispositions the exercises of which are *indefinitely* heterogeneous" (*CM*, 44, my italics).

So, Ryle seems explicitly to recognize that if dispositions unpack into hypotheticals, it is only into infinite hypotheticals that they unpack. As I have argued, only finite hypotheticals can be the bases of the sort of explanation and prediction which was described in Part I. So, regardless of what the language of Ryle's text may suggest, explanation and prediction of that sort should not be thought of as what Ryle thinks dispositional statements provide.

NOTES

1. Gilbert Ryle, *The Concept of Mind* (New York: Barnes and Noble, 1949). All further references to this book will be made in the text, denoted *CM*.

2. In some places he says or implies that sentences embodying dispositional words just are hypothetical statements (*CM*, 117), in other places that such sentences are *elliptical* for hypotheticals (*CM*, 85), and in other places that *to assert that* a dispositional property is truly predicable of some entity *is to assert* a hypothetical about it (*CM*, 89). This is not all. We are told that *to say* that something has a dispositional property *is to say* that a certain hypothetical proposition is true of it (*CM*, 43), and that hypothetical propositions are *implicitly conveyed* in the ascription of dispositional properties (*CM*, 43).

3. To be sure Ryle does not make the identification of dispositional statements and laws simply. In fact he clearly says that he does not think that dispositional statements are laws (*CM*, 123). Yet what he finds to be the difference between the two is revealing; it shows that in respect to their hypothetical character, and in respect of their use in inferring matters of fact from other matters of fact, laws and dispositional statements work exactly alike. Dispositional statements are distinct from laws for Ryle, not because they are not inference tickets while laws are; rather they are not laws only because they are not completely open or variable—i.e., universal—“for they mention particular things or persons” (*CM*, 123). Yet Ryle points out that they are partly open or variable. “To say that this lump of sugar is soluble is to say that it would dissolve, if submerged anywhere, at any time, and in any parcel of water” (*CM*, 123).

A law for Ryle would go:

(x) (y) ... (z) (F(x, y, ..., z) implies G(x, y, ..., z)).

A dispositional statement would go:

(y) ... (z) (F(a, y, ..., z) implies G(a, y, ..., z)).

4. It is clear why someone might want to hold this. For it can seem difficult otherwise to make intelligible the possibility of making conclusions about a person's mental states from his behavior. Ryle is concerned about what all of us should be concerned about but too seldom are, namely, how we can ever have grounds for saying something “mental” of a person, when that kind of something appears to go beyond what we can have evidence of.

5. In making these remarks I have in mind that something's brittleness would be analyzed into a hypothetical proposition whose antecedent consists of a conjunction of “conditions” upon or involving it, and whose consequent consists of a disjunction of (types of) “events” that can befall it.

6. This does not mean that there is no way to test, or even to test conclusively, for knowing how to speak French. It only means that there is no *single* test specifiable once and for all prior to every particular case. What we can expect of someone who wishes to deceive us about his abilities is different from what we can expect of someone who is proud of his abilities and who wants, perhaps too much to be easily successful, to

convince us how able he is. A taciturn man or a misanthrope behaves differently from a loudmouth or a Francophile. There are an unlimited number of different "paths" of testing for knowledge of French; each will at each stage depend on the responses of the subject at that point along the "path." (I am grateful to Thomas McElvain for discussions which helped me clarify my ideas about this matter.)

7. According to the tautology mentioned earlier: (A and B) implies (C or D) = (A implies C) or (B implies D).

8. We can perhaps conclusively verify it, but certainly not conclusively falsify it.

9. Even if solubility were not capable of being spelled out in terms of a finite hypothetical, this fact would only cast aspersions on the analysis of solubility as hypothetical. It does not save the analysis of intellectual ability.

10. Another immediate consequence is that dispositions analyzed as hypotheticals can differ from one another in kind, not by being different in respect of their hypothetical-ness and their consequent role in inference and prediction, but rather only by the character of the protasis and apodosis of the hypotheticals into which they are analyzable or to which they are equivalent. And indeed this is how Ryle distinguishes among the various sorts of dispositions. There are short-term and long-term dispositions, depending upon how long the events in the apodosis, which manifest the disposition, can be expected to keep happening. And there are single- and multi-track dispositions, depending upon how many different sorts of events and actions there are in the apodosis, and possibly upon how many different sorts of circumstances there are in the protasis. And these distinctions give Ryle a way of marking off the dispositions of people from the dispositional properties of materials: "Now the higher-grade dispositions of people with which this inquiry is largely concerned are, in general, not single-track dispositions, but dispositions the exercise of which are indefinitely heterogeneous" (CM, 44). But these sorts of differences are simply differences in the "packing" of the apodosis, and possibly the protasis, if dispositions are read strictly as hypotheticals.

11. There is another problem with this suggestion. The protasis of the hypothetical above contains a mental or psychological notion. But the whole tenor of *The Concept of Mind* requires—and indeed Ryle himself does seem to intend—that protasis and apodosis need contain no reference to the mental. For as I said above the fundamental strategy of *The Concept of Mind* is to argue against "the mind" as a special realm and against mental events and processes as events and processes existing within the special realm, and to do this by analyzing the mental element in human life as mainly dispositional. Now if the terms going into the protasis and apodosis of the hypotheticals which analyze this dispositional rendering of the mental are all themselves mental or psychological, then the carrying out of the strategy would beg the question. An objector could always say about the hypothetical analysis that he accepts it but does not accept the conclusion Ryle thinks it points to, since the hypothetical analysis itself refers to those special entities and processes which Ryle wants to attack. So there must be at least one hypothetical analysis of any dispositional statement, in which nothing clearly mental or psychological enters.

12. This problem only lurked in the background in the previous two suggestions. With this new suggestion there is still the problem that it contains psychological notions.

13. However, the differences are not fully explained by saying that, while all these are hypotheticals, they are different sorts of hypotheticals, which sorts are distinguished by the kinds of things that enter into their protases and apodoses and by the complexity of these two parts of the hypothetical.

14. But hypotheticals have the job of arousing only one degree of expectation, given certain circumstances: absolute certainty.

15. These latter sorts of differences cannot be explained by a strict interpretation of Ryle's doctrine. Its analysis could not account for the varying degrees of certainty, or the varying strengths of expectation which the different phrases are typically usable to arouse. The strict interpretation implies that my certainty, or my lack of it, that the expected events will happen is simply a function of my trust, or my lack of it, in the truth of the dispositional statement itself. But the fact is that I may have complete confidence in a dispositional statement and still not be at all sure that the events it enables me to "predict" will occur.